EIZO CX270

27” ColorEdge LCD monitor

Display colour accurately. The CX270 does just that. The 27-inch monitor impresses with 2560 x 1440 pixels, 16:9 aspect ratio, wide gamut and wide viewing angles. The large screen enables users to work effectively. It successfully masters fast video sequences and animations thanks to the overdrive function. Cameras can be connected directly via the HDMI port. The CX270 offers hardware calibration of white balance, brightness and hue curve with the ColorNavigator software and a colorimeter – both available as optional accessories. Colour reproduction for accurate image reproduction is another appealing feature. The integrated sensor ensures automatic adjustment measurements and keeps the calibrated colours stable in a reliable manner.

- Wide gamut LCD, contrast 1000:1, brightness 350 cd/m²
- Integrated measurement device and fully automatic self-correction
- Colour precision with 16-bit look-up table and up to 10-bit colour reproduction
- Digital Uniformity Equalizer for perfect luminance distribution and colour purity
- Temperature-controlled adjustment of colour drift and brightness
- 16-bit LUT for precise hardware calibration of brightness, white balance and gamma
- DisplayPort, DVI-I and HDMI inputs for digital and analogue port

5 YEARS WARRANTY

EIZO CX270
Features

Outstanding image quality The CX270 gleams with clear graphics and structures as well as sharp text contours. Its IPS-LCD module guarantees contrast and colour tones that are independent of the viewing angle.

Wide gamut The gamut of the CX270 includes significantly more colours than traditional LCD screens. For example, it covers colours in offset printing by over 99 per cent. For this reason, the screen visibly shows which saturation has been achieved with cyan and yellow tones.

High-resolution look-up table Thanks to its 16-bit look-up table, the CX270 can resolve image signals with an accuracy of 1/65 thousandths. Colour nuances and image structure are not lost, particularly in the case of dark hues. This reliable and precise reproduction reduces calibration steps, saving valuable production time.

Consistent hue curve and colour The brightness level of LCDs varies from module to module in relation to the image signal and the colour mix (addition) of red, green and blue. This can only be precisely recorded and controlled using special measurement devices. EIZO therefore configures each CX270 at the factory with its colours and hue curve at 343 grid points and in every primary colour. Therefore, a consistent colour temperature is attained on the entire grey value scale. Colour deviations usually amount to just 0.34 ΔE on average.
The result is that the colour reproduction is balanced, precise and reliable for the CX270.

Integrated measuring device and self-correction
The CX270 achieves stable colours thanks to its integrated measurement device. The monitor is calibrated beforehand with a conventional handheld measurement device. The sensor then uses adjustment measurements to automatically readjust the colours, thus ensuring stable colours. The user can determine the adjustment intervals. The adjustment is either triggered manually or programmed via ColorNavigator. The CX270 automatically starts the adjustment after the programmed monitor usage time elapses. The integrated sensor automatically positions itself for the measurement and hides away in the housing until the next adjustment.

Digital Uniformity Equalizer (DUE) The DUE in the CX270 ensures colour purity and even brightness distribution across the entire display surface. A chip automatically adjusts for irregularities. While conventional LCDs are optimised at best for homogeneity of a white surface, every hue looks the same across the entire screen with EIZO. The DUE ensures precisely matching colours from the centre right to the outermost edge of the screen. The DUE Priority function allows the user to freely choose whether to prioritise maximum homogeneity or maximum brightness.

Exact calibration The ColorNavigator software (optionally included in the CX270) has direct access to the monitor's look-up table during calibration. In the process, the user can freely determine colour temperature, brightness, black level and hue curve according to their requirements. The adjustment is based on the default setting and is therefore unique in its precision and speed. An optional handheld measurement device is necessary for monitor calibration.

Colour drift correction Temperature deviations in LCDs can also lead to imprecise colour reproduction, for example, when warming up the monitor. Colour deviations of more than 2 ΔE often arise, especially when the room temperature is unstable. The CX270 has an internal thermometer to eliminate these inaccuracies. It controls and reduces the colour drift fully automatically.

Brightness stabilisation Balanced brightness is crucial for brilliant colour reproduction. Conventional LCD monitors need one to two hours to level off their brightness. Indeed, they then react sensitively to temperature changes. The patented electronics of the CX270 therefore regulates the backlight. It automatically ensures constant brightness – regardless of the service life and temperature.

Overdrive The CX270 processes moving images by projection and overdrive in such a way that fast video sequences are displayed without any annoying delays.

Digital and analogue inputs DisplayPort, HDMI and DVI-I ports allow up to three computers to be connected at the same time. Users can switch either automatically or manually. HDMI signals from HD cameras can be displayed directly on the CX270 via HDMI and DisplayPort.

USB hub An integrated USB hub enables the connection of peripheral devices. For example, a keyboard and mouse can be connected to the monitor.The CX270 has two upstream ports. Therefore, devices connected to the monitor can be used alternatively with two computers.

HDMI The monitor offers conventional resolutions and image refresh rates for video production. HDMI signals (YUV and RGB) are supported with the refresh rates of 60, 50, 30, 25 and 24 Hz. The monitor also features I/P conversion. The CX270 can be conveniently used in video editing and animation systems, too.

Reliable and energy-efficient Power-off timer and PowerManager are among the energy-saving features. Protect the environment and save energy when the user is not currently using the computer. The power-off timer and PowerManager are particularly useful as they reduce the aging of the LCD backlight and luminance distribution. Brightness and homogeneity can be maintained for longer.

10-bit colour depth The CX270 has a Mini DisplayPort in addition to DVI interfaces. The port has a 10-bit colour resolution in combination with the frame rate control (FRC). This means the screen can display even the finest of colour gradations with a billion colours. However, you need to have the corresponding software and graphics board with 10-bit support.

FlexStand

This enables turning and tilting as well as operation in portrait and landscape format. The continuous height adjustment starts very low on the base and has a range of 15 centimetres. This guarantees optimal ergonomics, regardless of whether the user is sitting or standing in front of the screen. The FlexStand base is always fully stable, despite its maximum range of movement.

Test marks

EIZO Europe:

Austria ♦ www.eizo.at
Belgium and Luxembourg ♦ www.eizo.be
Czech Republic ♦ www.eizo.cz
Germany ♦ www.eizo.de
Hungary ♦ www.eizomonitor.hu
Italy ♦ www.eizo.it
Slovakia ♦ www.eizomonitor.sk
The Netherlands ♦ www.eizo.nl
United Kingdom ♦ www.eizo.co.uk

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Specifications

Diagonal	68 cm (27 inches) 16:9 aspect ratio
Visible image size	597 mm (width) x 336 mm (height)
Visible diagonal	685 mm
Ideal and recommended resolution	2560 pixels x 1440 lines
Dot pitch	0.233 mm x 0.233 mm
Displayed colours	1 billion (10-bit) DisplayPort 16.7 million (8-bit) DVI and HDMI
Colour control	16-bit look-up table 48-bit (3 x 16-bit) approx. 278 billion colour tones
Max. colour range	AdobeRGB: 97% ISO-coated V2: 99% sRGB: 100%, Rec709: 100%, EBU: 100%, SMPTE-C: 100%, DCI: 91%
Max. brightness	350 cd/m²
Max. dark room contrast	1000:1
Max. viewing angle	Horizontal: 178°; vertical: 178°
LCD technology	IPS
Typical mid-tone reaction time	6 ms
Typical reaction time, rise/fall	6/6 ms, black-white change
Features	Hardware calibration of brightness, white balance and gamma adjustment with optional measurement device, wide gamut, integrated measurement device for self-correction, 16-bit look-up table (48-bit R+G+B), Digital Uniformity Equalizer, temperature-controlled colour drift adjustment, overdrive, I/P conversion (HDMI), signal range extension (HDMI), noise reduction (HDMI), RGB gamut emulation, Color Universal Design mode (simulating colour blindness), HDCP decoder, USB V2.0, powered hub
Configuration options	Brightness, contrast, gamma 1 to 2.6 in steps of 0.1, colour saturation (gain) for RGBCMY, colour temperature 4,000–10,000 K, gamut clipping, DUE priority, power-off timer, OSD language (DE, UK, FR, SE, ES, IT
Resolutions	Max. 2560 x 1440 full image 1:1, HDMI 60 Hz: VGA, 480i, 480p, 1080i, 720p, 1080p HDMI 50 Hz: 576i, 576p, 1080i, 720p, 1080p HDMI 30 Hz/25 Hz/24 Hz: 1080p
Horizontal frequency	Digital: 26–89 kHz, 15–68 kHz (HDMI)
Vertical frequency	47.5–86 Hz (Digital: 23.75–63 Hz)
Video bandwidth	DVI/DisplayPort: 242 MHz, HDMI: 149 MHz
Graphic signals	DisplayPort, DVI (TMDS), HDMI (YUV and RGB)
Signal inputs	DisplayPort, DVI-I, HDMI
Plug & Play	VESA DDC CI
Power management	VESA DPMS, DVI-DMPM
Power consumption	Max.* 150 watts Typical power consumption of 74 watts, max. 0.5 watts in OFF mode 0 watts when the power switch is OFF
Dimensions (WxHxD)	65 cm x (43–58) x 28 cm
Weight	13.6 kg
Test marks	CE, TÜV GS, TÜV certified ergonomics, ISO 9241-307 pixel fault class 1
Flexibility	172° right/left, 30° to the back, 90° rotatable, 15 cm height adjustment
USB hub	2 upstream/2 downstream, rev. 2.0
Accessories included	Included: Manual in German, English and French, power, USB and signal cable for Mini DisplayPort and DVI-D
Optional accessories	EIZO ColorNavigator, light protection shields (CH5), i1display pro
Service***	Five-year on-site replacement service

Errors excepted 08/12

* at maximum brightness, as well as two signal inputs and USB hub in operation

** The duration of the warranty for the LCD module is five years from the date of purchase or a monitor usage time of 30,000 hours, whichever occurs first. The warranty also extends to normal wear and tear of the backlight if this is operated at a recommended brightness level of 120 cd/m² and a white balance of between 5,000 K and 6,500 K. EIZO guarantees this brightness for three years from the date of purchase or a monitor usage time of 10,000 hours, whichever occurs first.